

A NEW STROMATEIFORM FISH FROM SOUTH AUSTRALIA

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(CONTRIBUTION FROM THE AUSTRALIAN MUSEUM.)

Plate xvi.

A most interesting fish has been submitted to me for identification by the Director of the South Australian Museum. It belongs to the Series Stromateiformes, family Nomeidae, and represents a new genus and species, quite unlike any hitherto described.

It is hoped that efforts will be made to obtain further specimens of this fish, since the study of its oesophagus, to ascertain whether teeth are present there, its branchiostegals, gill-arches, and vertebrae is very desirable, and cannot be carried out on the unique type-specimen.

FAMILY NOMEIDAE

Genus CRIDORSA gen. nov.

Orthotype CRIDORSA MOONTA sp. nov.

A genus of small Stromateiform fishes with the body deep, form not elongate, flesh firm. Eye large, without adipose lids. Jaws with cusped incisors in front and small canines at the side. First dorsal fin well developed, with twelve spines. Soft dorsal and anal fins with about twelve rays. Pectoral fins small. Ventral fins well developed. Scales ctenoid. Coloration patterned.

In some respects this genus may represent a form ancestral to the more highly specialized Stromateiformes.

CRIDORSA MOONTA sp. nov.

D. xi/12; A. iii/12; P. 18; V. 1/5; C. 17.

L.lat.53. L.tr.8/1/20 from first dorsal spine, to 5/1/5 on caudal peduncle.

Head (15 mm.) 3, depth of body (21 mm.) 2·1 in standard length (45 mm.). Eye (5 mm.) 3, interorbital (6 mm.), 2·5 in head. General facies as shown in pl. xvi. Head very sealy, except anteriorly, where there are many large pores, the

latter mingling with scales on the broad, weakly convex interorbital. Two large nostrils on each side. Eyes large, with supraorbital ciliary processes. Jaws equal anteriorly, deflected downwards laterally. Premaxillary well developed, reaching back under the scaly maxillary.

A single outer row of erect incisor teeth in each jaw, each one compressed and with several cusps. Behind these is a series of inconspicuous villiform teeth, and there are small spaced canines at sides of jaws. Apparently there are no teeth on vomer or palatines.

Tongue free, tip broadly rounded. Velum maxillare present. Margins of preorbital and of upper limb of preoperculum serrated. Lower limb of preoperculum weakly serrated. The interoperculum, suboperculum, and branchiostegals are covered by strong ctenoid scales. Opercular margin free, entire. A small opercular spine. Gill openings wide, the membranes slightly overlapping across the narrow isthmus.

Risk of damaging the unique specimen prevents me from examining the branchiostegals, gill-arches and oesophagus. Chin and breast scaly. The broadest part of the fish is just behind the eyes. Body compressed, deep oval, and entirely covered with imbricate, thin but strong, markedly ctenoid scales, which extend over the bases of the fins.

About forty predorsal scales.

Lateral line complete, not very conspicuous, subparallel to the dorsal outline, each scale with a short tube.

Vent small, with a papilla, a little in advance of anal fin.

Caudal peduncle constricted.

First dorsal fin well developed, of eleven spines of which the middle ones are longest. Soft dorsal base shorter than that of spinous dorsal, and invested with scales. Anal fin commencing below notch between dorsal fins. It has three stout spines (middle one longest), and the soft fin terminates before the end of the soft dorsal. Twelve dorsal and anal rays, the last ones divided to their bases. Pectorals small, rounded, upper rays longest. Ventrals well developed, not reaching anal when adpressed, but only as far as vent. Caudal damaged in this specimen but probably originally emarginate.

Colour. A water-colour painting of the fresh fish shows the ground-colour as dull brownish on the back, becoming red to orange on the flanks, and dirty yellowish on the belly.

The sides of the head, body, and caudal peduncle are well-endowed with about sixty large white oval spots which break the ground-colour into a network. There is a subhorizontal white stripe below the eye.

The pupil of the eye is blackish, the iris is reddish to white, and the orbital

margin grey. The fins are similar in ground-colour to the adjacent parts of the body.. There is a good deal of white on the proximal half of the spinous dorsal, towards the rear of the soft dorsal, and over the caudal fin. The rays of the fins are largely greyish.

In spirit, the specimen is brownish-grey with the white spots now much duller. The fins are largely infuscated and the eye is blue. On the nape and belly the spots tend to fuse with their fellows of the other side to form cross-bars.

Described and figured from the unique holotype of the species, a specimen 45 mm. in standard length or about $2\frac{1}{5}$ inches overall.

Loc. South Australia: Spencer Gulf, Moonta Bay (H. Kemp, Mar. 1938). Type in South Australian Museum, Reg. No. F. 2023.

EXPLANATION OF PLATE xvi.

Cridorsa moonta sp. nov. (× 4).

